MRV Communications, Inc.

FIBER ACCESS SOLUTIONS

Datasheet

GBIC-to-SFP Media Module

Overview

Continuing to push the boundaries of media connectivity, the Fiber Driver™ GBIC-to-SFP Media Module from MRV Communications is a data rate independent, single channel solution for linking GBIC and SFP interfaces. It defines a new level of deployment flexibility and inventory management, enabling the implementation of an extremely wide range of network infrastructure solutions from media conversion and signal boosting to lambda conversion, Wave Division Multiplexing (WDM) and Optical Add/Drop Multiplexing (OADM).

The GBIC-to-SFP Media Module offers plug-n-play ease of installation. Simply place the module into a powered Fiber Driver chassis, insert the GBIC and SFP transceivers required for the protocol and distance of the application, and connect to the network. Changing the connection type later on only requires changing the transceivers. With the hot swappable functionality of the GBIC and SFP transceivers there is virtually no down time involved.

Because GBIC and SFP transceivers are portable they can be easily used again at different locations for different applications, maximizing the investment made in them and reducing the need for on-hand inventory. The industry's non-proprietary MultiSource Agreement (MSA) ensures that a wide selection of system compatible GBIC and SFP optics is available from multiple sources, including MRV Communications.

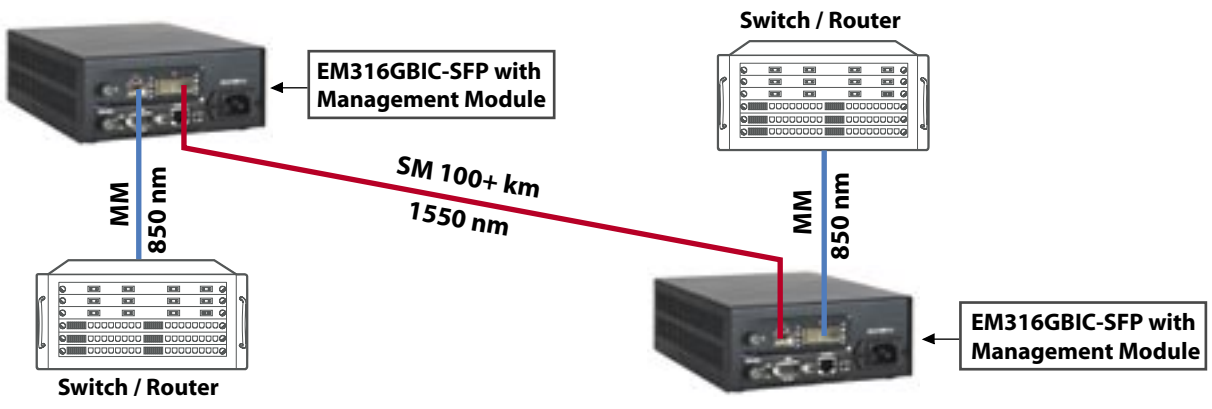
Features

- Provides GBIC interface to SFP interface connectivity
- Data rate independent, protocol transparent (protocol determined by choice of GBIC and SFP)
- Greater flexibility and scalability
  - Add/Change optics and adjust data rates as needed
  - Maintain single item inventory
- MSA compatible
  - Choose the best of the breed optics from MRV Communications or the vendor of choice
- Performs 2R data signal conditioning
- Supports SFP digital diagnostics as per SFF-8472
- SNMP manageable, MegaVision Web™ supported

Applications

- Media conversion
- Signal boosting
- Lambda conversion
- CWDM
- DWDM
- OADM

Typical Application: *Multimode to Singlemode Conversion*



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The GBIC-to-SFP Media Module is data rate independent and performs 2R – reshape and retransmit – conditioning of the data signal. Any protocol is supported, including Fast and Gigabit Ethernet, FDDI, ESCON, SONET (OC-3, OC-12, OC-48 and above), Fibre Channel (1 Gbps & 2 Gbps), Serial Digital Video Interface (SDI) SMPTPE-269 and SMTPE-292, DVB, HDTV (1.5 Gbps), and many others. The protocol is determined by the GBIC and SFP pair selected.

The EM316GBIC-SFP fully supports the GBIC and SFP standards, including SFP digital diagnostics as per SFF-8472. Together with the Fiber Driver Network Management Module (EM316NM), the GBIC-to-SFP Media Module provides real-time access to information such as transceiver type (protocol, range, vendor, etc.), transceiver temperature, TX/RX optical power, and transceiver supply voltage. It can also be set to provide management alerts should key system parameters fall outside of their normal operating range.

With an externally connected Mux/Demux unit such as the 4- or 8-channel Fiber Driver CWDM Passive Mux/Demux (EM316PA4N / EM316PA8N), the GBIC-to-SFP Media Module can be used as a WDM solution building block configured to the desired protocol/ data rate and provided with SFPs of the required wavelengths. Deployed along a WDM trunk at customer service points using MRV Communications' passive OADM technology, the GBIC-to-SFP Media Module can be used to create a sophisticated Add/Drop topology.

The GBIC-to-SFP Media Module is a hot swappable, single-slot module that can be placed in any powered Fiber Driver chassis. Through the Fiber Driver Network Management Module, the EM316GBIC-SFP is SNMP manageable and fully supported through the graphical user interface (GUI) of MegaVision Web™, MRV Communications' comprehensive Network Management System (NMS).

For additional information on this or any of the full line of MRV Communications products, including pricing and availability, contact your MRV Communications representative.

Physical Specifications:

Operating Temperature Range* (AC):	0°C to 50°C (32°F to 122°F)
Operating Temperature Range*(DC):	0°C to 70°C (32°F to 158°F)
Storage Temperature:	-10°C to 60°C (-14°F to 140°F)
Relative Humidity:	85% maximum, non-condensing
Physical Dimensions:	25 mm x 75 mm x 175 mm deep (1" x 3" x 7" deep)
Weight:	Approximately 213 g (75 oz)
Emission Compliance:	FCC - PART 15, SUBPART B, 1999, CLASS A; CE MARK - EN 50081-1:1992;
	EN 50082:1997; EN 55024:1998; EN 55022:1998; AS/NZS 3548:1995

*Operating Range listed is for the module only. Operating Range of pluggable interface(s) used may differ.

Ordering Info

Part Number	Function	Data Rate	Connectors	Wavelength	Budget	Range
EM316GBIC-SFP	Protocol independent GBIC-to-SFP media module	Data rate independent, protocol transparent	GBIC (x1), SFP (x1)	N/A (transceiver dependent)	N/A (transceiver dependent)	N/A (transceiver dependent)

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